**Use Case 1: User Registration**

* Goal: A new user wants to register an account on the Wholesale System web application.
* User Input: User provides personal information (name, email, address), chooses a username and password.
* System Actions:
  + The system validates the user's input data.
  + The system creates a new user account.
* Output: User receives a confirmation message, and their account is registered.

**Use Case 2: User Login**

* Goal: A registered user wants to log in to their account.
* User Input: User enters their username and password.
* System Actions:
  + The system verifies the user's credentials.
  + If valid, the system grants access to the user's account.
* Output: User gains access to their account dashboard.

**Use Case 3: Product Search and Purchase**

* Goal: A user wants to search for a product, add it to their cart, and complete the purchase.
* User Input: User enters search keywords, selects a product, adds it to the cart, and proceeds to checkout.
* System Actions:
  + The system searches for products matching the keywords.
  + The system updates the user's cart with the selected product.
  + The system guides the user through the payment process.
  + Output: User successfully completes the purchase, and the product is shipped.

**Use Case 4: Password Reset**

* Goal: A user wants to reset their password securely.
* User Input: User requests a password reset.
* System Actions:
  + The system sends a password reset email to the user's registered email address.
  + The system generates a secure password reset link.
* Output: User receives an email with a password reset link.

**Use Case 5: Customer Profile Update**

* Goal: A user wants to update their personal information in their profile.
* User Input: User edits their profile information (e.g., name, address).
* System Actions:
  + The system validates and updates the user's profile data.
* Output: User's profile information is updated.

**Use Case 6: Live Chat for Customer Support**

* Goal: A user requires real-time customer support through live chat.
* User Input: User initiates a live chat session.
* System Actions:
  + The system connects the user with a customer support agent.
  + The system provides a chat interface for real-time communication.
* Output: User receives real-time assistance from a support agent.

**Use Case 7: Order Tracking and Returns**

* Goal: A user wants to track their order and initiate a return if needed.
* User Input: User enters their order details and initiates a return request.
* System Actions:
  + The system retrieves order information and order status.
  + The system processes the return request.
* Output: User receives order tracking information and a return confirmation.

**Use Case 8: Product Filtering and Sorting**

* Goal: A user wants to refine product search results by applying filters and sorting options.
* User Input: User selects filters (e.g., price range) and sorting criteria (e.g., relevance).
* System Actions:
  + The system filters and sorts product search results based on user preferences.
* Output: User sees refined and sorted product listings.

**Use Case 9: Admin Login and Inventory Management**

* Goal: An administrator wants to log in and manage the inventory.
* User Input: Admin enters their credentials.
* System Actions:
  + The system authenticates the admin.
  + The system grants access to the admin panel with inventory management tools.
* Output: Admin gains access to inventory management features.

**Use Case 10: Profit Calculation and Reporting**

* Goal: An administrator wants to calculate monthly profits and review profit reports.
* User Input: Admin selects the profit calculation and reporting feature.
* System Actions:
  + The system calculates monthly profits based on sales and expenses.
  + The system generates profit reports.
* Output: Admin receives profit reports for analysis.

**Use Case 11: Cart Management**

* User Input: User interacts with the shopping cart interface.
* System Actions:
* View Cart Contents:
  + The system provides an option for users to view the contents of their shopping cart.
  + It displays the items, quantities, prices, and subtotal in a user-friendly manner.
* Add Items to Cart:
  + When the user selects a product to purchase, the system allows them to specify the quantity.
  + The system updates the shopping cart with the selected items and quantities.
* Remove Items from Cart:
  + The user has the option to remove items from their cart. -The system updates the cart to reflect the removal of items.
* Update Item Quantities:
  + Users can modify the quantity of items in their cart.
  + The system recalculates the subtotal and updates the cart accordingly.
* Calculate Total Price:
  + The system automatically calculates the total price of the items in the cart based on quantities and prices.
* Proceed to Checkout:
  + When the user is ready to make a purchase, they can initiate the checkout process.
  + The system prompts the user for payment and shipping details.
* Empty Cart:
  + Users have the option to clear their entire shopping cart.
  + The system removes all items from the cart upon user confirmation. Output: The user can effectively manage the items in their shopping cart, review the contents, update quantities, calculate the total price, and proceed to checkout for a seamless shopping experience. The system ensures that the user's cart accurately reflects their intended purchases.